App. Serial No. 10/517,106 Docket No.: NL020488US

In the Claims:

Please amend claims 1-2, and add new claims 12-15 as indicated below. This listing of claims replaces all prior versions.

- 1. (Currently Amended) A resistor network such as a resistor ladder network, comprising at least a resistor body that includes multiple resistor sub-bodies, and a plurality of columns of taps, which are each of the resistor sub-bodies connected to and situated between two of the columns of taps and connected to each of the taps of the two columns of taps, wherein, in use, at least two of the taps can are configured to be connected with respective first and second sources of reference input potentials, and wherein each tap of the columns of taps can be used is configured for outputting an output potential via a contact area which is connected with the concerning tap, and wherein the only electrical connections between the resistor sub-bodies are electrical connections via the taps connected with the resistor sub-bodies.
- 2. (Currently Amended) A resistor network according to claim 1, wherein each tap of the columns of taps is an extremity such as a T-shaped or S-shaped projection which is connected with one of the resistor sub-bodies.
- 3. (Previously Presented) A resistor network according to claim 1, characterised in that, a plurality of taps of a first column of taps of a first resistor sub-body is connected with a plurality of taps of a second column of taps of a second resistor sub-body, wherein each tap of the plurality of taps of the first column is connected with only one tap of the plurality of taps of the second column and wherein each tap of the plurality of taps of the second column is connected with only one tap of the plurality of taps of the first column.
- 4. (Previously Presented) A resistor network according to claim 3, characterised in that, each tap of the first column is shifted at least one column position with respect to the column position of the tap of the second column with which the tap of the first column is connected.

App. Serial No. 10/517,106 Docket No.: NL020488US

5. (Previously Presented) A resistor network according to claim 3, characterised in that,

the respective connections between the resistor sub-bodies with the taps are made during

fabrication of the resistor network at different arbitrary positions with respect to the

respective taps.

6. (Previously Presented) A resistor network according to claim 1, characterised in that,

the resistor network is a semiconductor circuit, wherein each resistor sub-body comprises

a number of resistor layers, wherein each semi-conducting resistor layer comprises at

least two taps, and wherein the semi-conducting resistor layers are interconnected via the

taps.

7. (Previously Presented) An Analog-Digital converter for generating a digital output

signal on the basis of an analog input signal, characterised in that, the Analog-Digital

converter comprises a resistor network according to claim 1.

8. (Previously Presented) A Digital-Analog converter for generating an analog output

signal on the basis of a digital input signal, characterised in that, the Digital-Analog

converter comprises a resistor network according to claim 1.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

3

App. Serial No. 10/517,106 Docket No.: NL020488US

12. (New) A resistor ladder network, comprising:

a resistor body that includes multiple resistor sub-bodies; and

a plurality of columns of taps, each of the resistor sub-bodies situated between two of the columns of taps and connected to each of the taps of the two columns of taps, the columns of taps arranged in parallel to and alternating with the resister sub-bodies,

wherein at least two of the taps are configured to be connected with respective first and second sources of reference input potentials, each tap of the columns of taps is configured for outputting an output potential via a contact area which is connected with the concerning tap, and the only electrical connections between the resistor sub-bodies are electrical connections via the taps connected to the resistor sub-bodies.

- 13. (New) A resistor ladder network according to claim 12, wherein each tap of the columns of taps is a T-shaped or S-shaped projection which is connected with one of the resistor sub-bodies and each of the columns of taps includes at least three taps.
- 14. (New) A resistor ladder network according to claim 12, wherein a plurality of taps of a first one of the columns of taps connected to a first one of the resistor sub-bodies is connected with a plurality of taps of a second one of the columns of taps connected a second one of the resistor sub-bodies, each tap of the first column connected with only one of the taps of the second column.
- 15. (New) A resistor ladder network according to claim 14, wherein each tap of the first column is shifted at least one column position with respect to a column position of the tap of the second column with which the tap of the first column is connected.